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| APPLICATION NO.        | F         | ILING DATE               | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|------------------------|-----------|--------------------------|----------------------|-------------------------|------------------|
| 10/729,919             | <u> </u>  | 12/09/2003               | Yueh Wen Hsiang      | MR1957-812              | 2403             |
| 4586                   | 7590      | 07/14/2006               |                      | EXAMINER                |                  |
|                        |           | EIN & LEE                | NGUYEN, KIMNHUNG T   |                         |                  |
| 3458 ELLIC<br>ELLICOTT |           | NTER DRIVE-S<br>ID 21043 | ART UNIT             | PAPER NUMBER            |                  |
| EEEICOTT               | C11 1, 10 | 210.15                   |                      | 2629                    |                  |
|                        |           |                          |                      | DATE MAILED: 07/14/2006 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.  | Applicant(s)   |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|
|  | 10/729,919   | HSIANG, YUEH WEN   |  |  |  |  |  |  |
| Office Action Summary  | Examiner   | Art Unit   |  |  |  |  |  |  |
|  | Kimnhung Nguyen  | 2629   |  |  |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c   | orrespondence address  |  |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI | l. lely filed the mailing date of this communication. (35 U.S.C. § 133). |  |  |  |  |  |  |
| Status   |  |  |  |  |  |  |  |  |
| 1) Responsive to communication(s) filed on   |  |  |  |  |  |  |  |  |
| • •  | action is non-final.   |  |  |  |  |  |  |  |
| ,—   | ,—   |  |  |  |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |  |  |  |  |  |  |  |  |
| Disposition of Claims  |  |  |  |  |  |  |  |  |
| 4)⊠ Claim(s) <u>1-13</u> is/are pending in the application.  | )⊠ Claim(s) 1-13 is/are pending in the application.  |  |  |  |  |  |  |  |
|  | 4a) Of the above claim(s) is/are withdrawn from consideration.   |  |  |  |  |  |  |  |
| 5) Claim(s) is/are allowed.  |  |  |  |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1-13</u> is/are rejected.  | · · · · · · · · · · · · · · · · · · ·  |  |  |  |  |  |  |  |
| 7) Claim(s) is/are objected to.  | Claim(s) is/are objected to.   |  |  |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | 8) Claim(s) are subject to restriction and/or election requirement.  |  |  |  |  |  |  |  |
| Application Papers   |  |  |  |  |  |  |  |  |
| 9) The specification is objected to by the Examine   | r.   |  |  |  |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.   |  |  |  |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |  |  |  |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |  |  |  |  |  |  |  |  |
| 11)☐ The oath or declaration is objected to by the Ex  | aminer. Note the attached Office   | Action or form PTO-152.  |  |  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |  |  |  |  |  |  |  |  |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:   |  |  |  |  |  |  |  |  |
| <ol> <li>☐ Certified copies of the priority documents</li> </ol>   | 1. Certified copies of the priority documents have been received.  |  |  |  |  |  |  |  |
| <ol><li>Certified copies of the priority documents</li></ol>   | 2. Certified copies of the priority documents have been received in Application No   |  |  |  |  |  |  |  |
| <ol><li>Copies of the certified copies of the prior</li></ol>  | 3. Copies of the certified copies of the priority documents have been received in this National Stage  |  |  |  |  |  |  |  |
| application from the International Bureau  | application from the International Bureau (PCT Rule 17.2(a)).  |  |  |  |  |  |  |  |
| * See the attached detailed Office action for a list of  | of the certified copies not receive  | d.   |  |  |  |  |  |  |
| Attachment(s)  |  |  |  |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  | 4) Interview Summary   | (PTO-413)  |  |  |  |  |  |  |
| 2) D Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Da  | te   |  |  |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date   | 5)  Notice of Informal Pa  | atent Application (PTO-152)  |  |  |  |  |  |  |

#### **DETAILED ACTION**

This application has been examined. The claims 1-13 are pending. The examination results are as following.

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 2. Claims 1, 4-5, 8-11 are rejected under 35 U.S.C. 102(a) as being anticipated by Sandbach et al. (US 2003/0011576).

As to claim 1, Sandbach et al. discloses in fg.3, a thin electronic input device (frabric keyboard 102), comprising:

a film layer (layer fabric 317) made of a flexible material (because durable fabric 317 made of durable fabric, see 0045);

a conducting layer (301,307,302,311,313,314) mounted on the film layer (317) for sensing a human pulse wave (because the system will be provided the pulse wave by the user touches sensing by finger or pen on the surface of the fabric layer (303);

a covering layer mounted on the conducting layer (because layer fabric is a durable fabric cover (see 0045);

a character display layer mounted on the cover layer, the character display layer having a plurality of keyboard characters printed thereon (see fabric keyboard is a layer 303 which has

Art Unit: 2629

printed on its upper surface graphical representations corresponding to the alphanumeric keys of the keyboard, see 0038);

an IC control unit (PIC 502) connecting to the conducting layer 301, 307, 302, 311, 313, 314); and a connecting unit (electrical connections 504-507) electrically connecting to the conducting layer (because IC control unit 502 can be mounted and connected to the plurality of conductive layers (301, 307, 311, 313 and 314, fig. 3, see 0056).

As to claim 5, claim 5 is similar claim 1 and discussed above.

As to claims 4 and 8, Sandbach et al. discloses the electronic input device, further wherein the IC control unit (502) is mounted on the conducting layer (because IC control unit PIC 502 can be mounted connected to the plurality of conductive layers 301, 307, 311, 313 and 314, fig. 3, see 0056).

As to claim 9, Sandbach et al. discloses the electronic input device further, wherein the IC control unit (502) is build in the electronic device (because IC control unit 502 can be mounted and connected to the plurality of conductive layers (301, 307, 311, 313 and 314, fig. 3, see 0056).

As to claim 10, Sandbach et al. discloses the electronic input device further, wherein the connecting unit (504-507) is electrically fixed on a circuit of the electronic device (because each of them is corresponding to each of conductive layers 311, 312, 314 and 313 respectively of the input device of keyboard 102, see 0056-0057).

As to claim 11, Sandbach et al. discloses the electronic input device further, wherein the connecting unit (504-507) is separably electrically connected to a circuit of the electronic device

Art Unit: 2629

because each of them is corresponding to each of conductive layers 311, 312, 314 and 313 respectively of the input device of keyboard 102, see 0056-0057).

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandbach et al. (US 2003/0011576) in view of Merz (US 5,565,657).

As to claim 12, claim 12 depends on claim 5 and is rejected on the same reasons of claim 5 as discussed above. Further, Sandbach et al. discloses the electronic input device (keyboard 102) is an elastically (because, Sandbach et al. discloses the keyboard 102 is fabric layer with a plurality of conductive layers). However, Sandbach et al. does not disclose that the electronic input device is rolled in an inner chamber of the electronic device.

Merz discloses in fig. 7, a flexible keyboard (input device) having template (242), and freehand pallet (244), thus the template (242) and freehand pallet (244) can be rolled by inserting into the terminal (240) (see fig. 7, see col. 16, lines 18-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the a flexible keyboard can be rolled in an terminal as taught by Merz into the input device is elastically of Sandbach for producing the claimed invention because this would provide the appropriate keyboard function of the user interface is initiated by closing

Art Unit: 2629

switch 247B, likewise, when the freehand pallet is inserted in terminal (see Merz, col. 16, 26-29), therefore, the template (242) and freehand pallet (244) can be rolled into the terminal, this would also protects the keyboard to clean when the user is not using it.

As to claim 13, claim 13 depends on claim 5 and is rejected on the same reasons of claim 5 as discussed above. Further, Sandbach et al. does not disclose that the electronic input device is rolled on an exterior of the electronic device.

Merz discloses in fig. 7, a flexible keyboard (input device) having template (242), and freehand pallet (244), thus the template (242) and freehand pallet (244) can be rolled on an exterior of the electronic device (flexible keyboard, fig. 7, col. 16, lines 18-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the a flexible keyboard can be rolled on an exterior of the flexible keyboard as taught by Merz into the input device is elastically of Sandbach for producing the claimed invention because this would provide the appropriate keyboard function of the user interface is initiated by closing switch 247B,likewise, when the freehand pallet is inserted in terminal (see Merz, col. 16, 26-29), therefore this also protects the keyboard to clean when the user is not using it.

5. Claims 2-3 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandbach et al. (US 2003/0011576) in view of Stefik et al. (US 5,724,064).

Claims 2-3 and 6-7 depend on claims 1 and 5 and are rejected on the same reasons of claims 1 and 5 as discussed above. Further, Sandbach et al. discloses the film layer is made of durable fabric (because durable fabric 317 made of durable fabric, see 0045). However, Sandbach et al. does not disclose that the film layer is made of paper or non-woven cloth.

Art Unit: 2629

Stefik et al. discloses in figs. 2-3, a computer system having a display sheet comprises a thin transparent sheet is a flexible like paper (see col. 2, lines 58-62).

It would have been obvious to one of ordinary skill I the art at the time the invention was made to implement the transparent sheet is flexible paper as taught by Stefik et al. into the electronic input device having film layer of Sandbach et al. for producing the claimed invention because this would provide to the user a plurality of attributes of paper document, it looks like paper, has ambient light valve behavior like paper, and the brighter the ambient light, the more easily it may seen, and also applied to the archival memory of the paper (see Stefik et al., col. 2, lines 58-64), and this flexible paper also is non-woven cloth because flexible paper is not woven cloth.

#### Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kimnlung Manupm Kimnhung Nguyen Patent Examiner July 5, 2006

Page 7